

REMARKS

Claims

Claims 30–40 are pending with claims 1–29, 31 and 32 canceled without prejudice or disclaimer.

Claim Amendments

Claim 30 incorporates the aspects of claim 32, which is hereby cancelled. The cancellation of claim 31 is self-explanatory.

It is respectfully submitted that the claim amendments do not raise new matter.

Rejection under 35 U.S.C. § 112, ¶1 (written description)

Applicants disagree with the PTO's contention that original claims 30–40 lack adequate written description with respect to the antibody molecules claimed herein. However, in order to facilitate prosecution, claim 30 (sole independent claim) has been amended. Applicants' amendment of the claim is not to be construed as acquiescence to this or any other ground of rejection. It is courteously submitted that Applicants' amendment of the claims, further in view of the Examiner's remarks at page 3, ¶4 of the present Office Action, renders the rejection moot.

See also, *Noelle v. Lederman*, 355 F.3d 1343, 1349, 69 USPQ2d 1508, 1514 (Fed. Cir. 2004), wherein the court held that the “disclosure of an antigen fully characterized by its structure, formula, chemical name, physical properties, or deposit in a public depository provides an adequate written description of an antibody claimed by its binding affinity to that antigen.” Insofar as the antibody species recited in the claims have been fully characterized, the statutory requirements under §112, ¶1 are duly satisfied. Withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. §103

Claim 32 has been rejected under this section as allegedly being unpatentable over Bending (US 5,558,864) in view of Ye (*Oncogene*, 1999) and Ciardiello. This rejection is respectfully traversed.

To further support this rejection, the Office Action relies on *In re Kerkhoven* 205 USPQ 1069(CCPA 1980) to contend that “it would have been obvious...to combine the

humanized chimeric antibody c225, as taught by Yet et al. or Ciardiello et al., to formulate a third composition for that same exact purpose.” See, page 9, ¶1 of the open Office Action. Applicants respectfully disagree with this analysis.

The PTO’s reliance on *In re Kerkhoven* is misplaced, especially in view of the disclosure contained in the specification regarding the activity of the claimed composition. For example, in the Kerkhoven case, “it was determined that the claims require *no more than mixing* of the two conventional detergent compositions” and that “the appellant had not demonstrated any unexpected advantage for the claimed process.”

The PTO’s contention is that Ciardiello provides the motivation to combine the teachings of Bendig (which allegedly discloses humanized MAb425) with that of Ye (which allegedly discloses c225 antibody). Firstly, it should be noted that Ciardiello discloses the use of Mab c225 in combination with topotecan, a cytotoxic drug. Although the reference generically teaches different types of “blocking anti-EGFR MAbs” such MAb 528 and MAb225 (mouse antibodies), there is no teaching or suggestion to use these in a composition. As such, Ciardiello is totally silent with respect to the subject matter of the present invention, for example, a composition comprising humanized MAb 425 (h425) and chimeric MAb 225 (c225).

Secondly, the PTO’s contention that the cited reference discloses a “cooperative effect” (see, page 8, last paragraph) is misplaced. Ciardiello merely evaluates whether “MAb C225 has any cooperative effect with topotecan.” See, particularly the INTRODUCTION & RESULTS sections of this article, and the disclosure contained in Fig. 5. This says nothing about the activity of the claimed molecules, when used in a manner recited in the claims.

Furthermore, in view of Applicants’ disclosure of unexpected properties of the claimed molecules when utilized together, it is submitted that this rejection cannot stand. For example, the Examiner is requested to review the Examples 1–5 provided at pages 41–44 of the instant specification, wherein it is expressly stated that a composition comprising the two antibodies, cetuximab (C225 antibody) and EMD 72 000 (MAb425), results in increased binding to cell-surface receptors (per cell), enhanced cell aggregation, enhanced inhibition of ligand-binding to cognate EGF receptor(s), enhanced displacement of bound ligands, and increased receptor internalization. See, also the disclosure contained in Figs. 1–5 and the description thereof at page 41 of the specification.

Therefore, it is respectfully submitted that the instantly claimed subject matter is fully

inventive over the cited references and that the Office Action has failed to meet the basic criteria for *prima facie* case of obviousness. As such, all the rejections under 35 U.S.C. §103(a) must be withdrawn.

Claims 30–31, 33, 35–37 and 40 are rejected under §103(a) as allegedly being unpatentable over Greene et al. (US 5,705,157) in view of Mendelsohn (US 4,943,533) further in view of Fan (*Cancer Research*, 1993), Ciardiello (*Clinical Cancer Research*, 1999) and Gill (*Journal of Biological Chemistry*, 1984). Applicants respectfully traverse the rejection.

At the outset it is submitted that the rejection is moot in view of the amendments, i.e., claim 32 was not rejected and the substance of claim 32 is incorporated into amended claim 30. Withdrawal of the rejection is respectfully requested.

Under item 13 of the Office Action, claims 37–38 are alleged to be unpatentable under the same section over the aforementioned references further in view of Akimoto (US 5,861,449). Claim 39 is alleged to be unpatentable over the aforementioned references further in view of Thorpe (US 6,342,219) (see, item 14 of the Office Action). It is submitted that in view of the claim amendments, the rejections are moot. Applicants' amendment of the claims should not be construed as acquiescence to this or any other ground of rejection. Withdrawal of the rejection is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response to Deposit Account No. 13-3402.

Respectfully submitted,

/Brion P. Heaney/
Brion P. Heaney, Reg. No. 32,542
Attorney for Applicant(s)

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza 1, Suite 1400
2200 Clarendon Boulevard
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

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